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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HSU-HSIANG WU	10/09/2018
WEIXIN DONG	10/09/2018
JIN MA	10/09/2018
CHRISTOPHER GOLLA	10/12/2018

RECEIVING PARTY DATA

Name:	HALLIBURTON ENERGY SERVICES, INC.
Street Address:	3000 N. SAM HOUSTON PARKWAY E.
City:	HOUSTON
State/Country:	TEXAS
Postal Code:	77032-3219

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16644137

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	1560-050502	
NAME OF SUBMITTER:	DANIEL MASTERS	
SIGNATURE:	/dlm/	
DATE SIGNED:	03/03/2020	

Total Attachments: 5

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PATENT REEL: 052000 FRAME: 0880

ASSIGNMENT

Whereas, We, Hsu-Hsiang Wu of Sugar Land, Texas, Weixin Dong of Sugar Land, Texas, Jin Ma of Houston, Texas and Christopher Golla of Kingwood, Texas ("ASSIGNORS"), have invented DETERMINATION ON CASING AND FORMATION PROPERTIES USING ELECTROMAGNETIC MEASUREMENTS, and

Whereas, **Halliburton Energy Services**, **Inc.**, a Delaware Corporation having a place of business at 3000 N. Sam Houston Parkway E., Houston, Texas 77032-3219, United States of America (sometimes hereinafter called "ASSIGNEE"), is desirous of acquiring an interest therein,

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, We do hereby ASSIGN, SELL and CONVEY to said **Halliburton Energy Services**, **Inc.**, its successors and assigns, the entire right, title and interest throughout the world in and to:

- 1. Said invention in **DETERMINATION ON CASING AND FORMATION PROPERTIES USING ELECTROMAGNETIC MEASUREMENTS**,
- 2. United States application on said invention, Application No. 62/577,602, filed October 26, 2017, entitled **DETERMINATION ON CASING AND FORMATION PROPERTIES USING ELECTROMAGNETIC MEASUREMENTS**, Halliburton Reference No. 2017-IPM-101754V1 US.
- 3. Patent Cooperation Treaty international application on said invention, Application No. PCT/US2018/055926 , filed October 15 , 2018, entitled **DETERMINATION ON CASING AND FORMATION PROPERTIES USING ELECTROMAGNETIC MEASUREMENTS**, Halliburton Reference No. 2017-IPM-101754U1 PCT (The undersigned hereby grant(s) the firm of Tumey L.L.P. of 5177 Richmond Avenue, Suite 1188, Houston, Texas 77056 the power to insert on this assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document);
- 3. All applications for patent or like protection on said invention that have now been or may in the future be made by me or my legal representatives, including any continuation, continuation-in-part and any other utility applications that may be based on this invention, whether in the United States of America or in any other country or place anywhere in the world;
- 4. All patents and like protection that have now been or may in the future be granted on said invention to me or my legal representatives, whether in the United States of America or in any other country or place anywhere in the world;

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- 5. All substitutions for and divisions, continuations, continuations-in-part, renewals, reissues, extensions, and the like of said applications and patents and like grants, including without limitation, those obtained or permissible under past, present and future laws and statutes;
- 6. All rights of action on account of past, present and future unauthorized use of said invention and for infringement of said patents and like protection;
- 7. The right in ASSIGNEE to file in its name applications for patents and like protection for said invention in any country or countries foreign to the United States; and
- 8. All international rights of priority associated with said invention, applications, patents and like protection and we covenant that we, and our heirs, legal representatives, assigns, administrators, and executors, will, at the expense of ASSIGNEE, its successors and assigns, execute all papers and perform such other acts as may be reasonably necessary to give ASSIGNEE, its successors and assigns, the full benefit of this Assignment.

Executed this 94 day of Octob	25, 2018
	12-11
·	Hsu-Hsiang Wu
STATE OF TEXTS) SS COUNTY OF HERRY)	•
) SS	
COUNTY OF HYPRICS)	
Before me personally appeared said Hsu-F instrument to be his free act and deed this ?	Isiang Wu and acknowledged the foregoing day of <u>()とすのちに </u> , 2018.
Seal	avoja Collee Bush
	(Notary)
	ANGIE COLLEEN BUSH
	Notary ID #1164663-1

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Executed this 9th day of	October_, 2018
	MANG
OFD A CORP. OFF.	Weixin Dong
STATE OF James XITS)
STATE OF TEXAS COUNTY OF HERRIS)
Before me personally apperinstrument to be his free act a	ared said Weixin Dong and acknowledged the foregoing and deed this day of <u>Octobek</u> , 2018.
Seal	<u>Angie Colleer Bush</u> (Notary)
	ANGIE COLLEEN BUSH Notery ID #1184883-1 My Commission Expires December 22, 2021

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Executed this	M_day of	Qct_	, 2018		
STATE OF COUNTY OF	Texas Harris)) ss)	Jin Ma	Jan I	
Before me perso to be his free act				dged the foregoing, 2018.	ng instrument
Seal			Angie	Collen (Notary)	Bush
				ANGIE COLLEEN Notary ID #1164 Wy Commission E December 22,	BUSH 863-1 ixpires

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Executed this 12 day of Oct	, 2018	
	A. II.	
	Christopher Golla	
STATE OF	and a second se	
,		
COUNTY OF) ss		
Before me personally appeared said Christopher Golla and acknowledged the foregoing instrument to be his free act and deed this \square day of \cap \cap \cap \cap \cap \cap \cap \cap		
TINA ROBERTSON Notary Public, State of Texas My Commission Expires February 18, 2019	Vino (Notary)	

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RECORDED: 03/03/2020